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| Timothy B. Scull Merchant & Gould P.C. P.O. Box 2903 Minneapolis, MN 55402-0903 | | | EXAMINER REFAI, RAMSEY | |
| | | | ART UNIT 3627 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/992,862

Applicant(s)

KERMARREC ET AL.

Examiner

Ramsey Refai

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Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-7,20,22-25 and 30-49 is/are pending in the application.
- 4a) Of the above claim(s) 30-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7,20,22-25 and 40-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Response to Amendment

Responsive to Request for Continued Examination (RCE) filed February 19, 2009.

Claims 1, 20, 24, 25, and 46-49 have been amended. Claims 30-39 remain withdrawn.

Claims 1-3, 5-7, 20, 22-25, 40-49 remain pending.

Response to Arguments

1. Applicant's arguments have been fully considered but they are not persuasive.

- In the remarks, the Applicant argues with substance:

Argument A: *The Office Action's rejection of claim 1 is improper because it does not provide support element by element of claim 1.*

In response, the Examiner respectfully disagrees. **The Applicant is reminded that the Office is not required to state specific citations unless the reference is complex or describes inventions different than that claimed by the Applicant (see 37 CFR 1.104c2).** The reference is neither complex nor related to an invention different than that claimed by the Applicant. However, as a courtesy to the applicant and in a sincere effort to efficiently advance prosecution of the case, the Examiner has in fact provided clear and concise citations and descriptions of the relevant portions of the applied reference.

It is noted the Examiner has cited specific citations in the reference(s) as applied to the claim(s) above for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that the Applicant, in preparing their response, fully consider the

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references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Argument B: *Flanagan does not teach a partial view.*

In response, the Examiner respectfully disagrees. Flanagan teaches a receiving node receives a message a determines whether the packet has been received. If it has not been received, the receiving nodes stores the information contained in the packet and forwards it to the nodes that are connected to it (partial view).

Argument C: *Flanagan fails to teach "to provide a determined probability" of message being sent to all nodes.*

In response, the Examiner asserts that this limitation is merely a recitation of the intended use of the claimed invention. The recitation must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which

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it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-3, 5-7, 20, 22-25, 40-49 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Independent claims 1, 20, 24, and 25 have been amended to include the limitation wherein the partial view identifies any two or more but less than all nodes on the network such that a *second node is connected directly to the first node and a third node is connected indirectly to the first node* which appears unsupported by Applicant's disclosure and therefore deemed new matter. It is unclear whether the inventors at the time the application was filed, had possession of the claimed invention.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not

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commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-3, 5-7, 20, 22-25, 43-45, 47-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flanagan (US 5,506,838).

6. As per claim 1, Flanagan teaches a method of disseminating information to a plurality of nodes, the nodes connected in a network environment, said method comprising:

receiving, at a first node, a disseminated message, the message having broadcast- type information (**see at least abstract; receiving node receives packet**);

for the first node, creating a partial view (**nodes that are directly connected to receiving node**), wherein the partial view is specific to the first node and resides locally to the first node, and wherein the partial view identifies any two or more but less than all nodes on the network such that a second node is connected directly to the first node and the nodes are distributed across the network and such that the partial view comprises address information for at least one of the nodes in the partial view , wherein the number of nodes identified in the partial view is determined in order to provide a determined probability of the message being sent to all nodes (**see at least column 2, lines 18-64, fig 5, abstract; receiving node has address information on nodes connected to it in order to deliver packet**);

evaluating the received message; determining if the received message has been previously received by the first node; and if the received message has not been previously received, delivering the message to only nodes identified in the partial view of

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the first node and storing identification information for the received message in a storage device (**see at least column 2, lines 18-64, fig 5, abstract; receiving node delivers messages to nodes that are directly connected**).

Flanagan teaches the forwarding of packets to indirectly connected nodes (**see at least abstract; transmitting node is able to transmit the packet to nodes that are indirectly connected to it**) but fails to teach that the partial view includes *a third node is connected indirectly to the first node*. However, it would have been obvious to one of ordinary skill in the art to modify Flanagan to include this limitation because doing so would expand the receiving nodes distribution capabilities by allowing the packet to be sent to nodes indirectly connected to it.

7. As per claim 2, Flanagan teaches wherein the act of delivering the message further comprises delivering the message to a subset of all nodes identified in the partial view (**see at least column 2, lines 35-64**).

8. As per claim 3, Flanagan teaches wherein each node in the network maintains a partial view (**see at least column 2, lines 35-64**).

9. As per claim 5, Flanagan teaches if the message has been previously received, then not delivering the message to any other node identified in the partial view (**see at least fig 5**).

10. As per claim 6, Flanagan teaches the act of storing identification information related to the received message to enable the determination of whether the message has been previously received (**see at least fig 5, column 2, lines 35-51**).

11. As per claim 7, Flanagan teaches determining whether the message is a broadcast-type message; and if the message is not a broadcast-type message, then not delivering the message to any other node identified in the partial view (**see at least fig 5, column 2, lines 35-51**).

12. As per claim 43, Flanagan teaches wherein the partial view comprises status information for at least one of the nodes in the partial view (**see at least column 3, lines 10-25, column 1, lines 25-45**).

13. As per claim 44, Flanagan teaches wherein the partial view comprises lifetime value information for at least one of the nodes in the partial view (**see at least column 3, lines 10-25**).

14. As per claim 45, Flanagan teaches wherein the act of gossiping further comprises: receiving a broadcast-type message; and delivering the received message to a subset of all nodes identified in the partial view (**see at least column 5, line 31-column 6, line 21**).

15. As per claims 20, 22-25, and 47-49, these claims contain similar limitations as claims 1, 2, 43-45 above and therefore are rejected under the same rationale.

16. Claims 40-42 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flanagan in view of Fujiwara et al (US 5,471,580).

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17. As per claims 40-42 and 46, Flanagan teaches wherein the partial view has a defined size (**see column 2, lines 35-65**) but fails to teach *wherein the size of the partial view is determined by one from the group consisting of $\log(n)$ and $\log(n)$ multiplied by a predetermined value, wherein n relates to the number of nodes in the network and \log refers to the natural logarithm*. However, in the same field of endeavor, Fujiwara et al teach a route discovery using the logarithm of the number of nodes (**see at least column 14, line 15-column 15, line 15**). It would have been obvious to one of ordinary skill in the art at the time of the Applicant's invention to combine Flanagan and Fujiwara et al because doing so would allow for a routing table in Flanagan to be created using the logarithm method shown in Fujiwara et al.

Conclusion

Examiner's Note: The Examiner has cited specific citations in the reference(s) as applied to the claim(s) above for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that the Applicant, in preparing their response, fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Refai whose telephone number is (571) 272-3975. The examiner can normally be reached on M-F 8:30 - 5:00 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ryan Zeender can be reached on (571) 272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ramsey Refai
March 26, 2009
/Ramsey Refai/
Examiner, Art Unit 3627